

3M™ Scotchcast™ Easy Dispenser 250

Electrical insulating, re-enterable resin

1. Product description

3M™ Scotchcast™ Easy Dispenser 250 is an easy to use dispenser of electrical re-enterable resin for electrical installers. The 3M™ Scotchcast™ Easy Dispenser 250 contains 3M™ Scotchcast™ Resin 2123. This is a soft, two-part polybutadiene electrical resin encapsulant, designed for re-enterable splice protection.

3M™ Scotchcast™ Resin 2123 is formulated for virtually every electrical application requiring a reliable, soft, re-enterable resin with good handling and performance characteristics. 3M™ Scotchcast™ Resin 2123 has good wetting properties and low viscosity.

The resin flows well at low temperatures, filling the closure and minimising air voids.

2. Applications

3M™ Scotchcast™ Resin 2123 is used for electrical insulation and moisture sealing of multicore low voltage cables up to 0.6/1 (1.2) kV in junction boxes where a re-enterable system is required.



3. Typical properties

3.1 Physical and Electrical Properties

| Physical properties | Typical value | Specification |
|---------------------------|-----------------------|---------------|
| Mixing ratio A:B | 1:1 | – |
| Colour | Amber, Translucent | – |
| Gel Time at 23 °C | 40 min +/- 5 min | DIN 16945 |
| Part A&B mixed | | |
| Density | 0.86g/cm ³ | EN ISO 1183-1 |
| Curing time at 21 °C | 24 hours | – |

Part A&B cured*

| Mechanical properties | Typical value | Specification |
|-----------------------|---------------|---------------|
| Tensile strength | 0.04 Mpa | EN ISO 527 |
| Elongation at break | 31.6% | EN ISO 527 |

| Electrical properties | Typical value | Specification |
|----------------------------|----------------------------|---------------|
| Volume resistivity | | |
| at 23°C | > 7 × 10 ¹² Ωcm | HD 429 |
| at 80°C | > 1 × 10 ¹¹ Ωcm | HD 429 |
| Dielectric Strength | | |
| at 23°C | 22 kV/mm | EN 60243-1 |
| Dissipation factor | | |
| at 23°C | 0.03 | IEC 60250 |
| at 80°C | 0.1 | IEC 60250 |
| Dielectric constant | | |
| at 23°C | 2.65 | IEC 60250 |
| at 80°C | 2.49 | IEC 60250 |
| Water absorption | | |
| at 50°C, 42d | 0.18% | ISO 62 |

* curing and aging according to Cenelec HD631.1 S2

3.2 Performance Tests

3M™ Scotchcast™ Resin 2123 has been tested with proper cable junction box according to IEC 60529 and meets the requirements of IP 68.

4. Usage Information

4.1 Features

- ▶ 3M™ Scotchcast™ Easy Dispenser 250 is compatible and used with commercially available applicator guns
- ▶ Mixing of resin components is by a static mixer and delivered together with cartridge
- ▶ Easy re-accessibility of the cable connection
- ▶ Homogeneous and reliable insulation
- ▶ Good protection against water (IPx8)
- ▶ Low exothermic reaction temperature (0.6°C raise from 24°C)
- ▶ Continuous operating temperature of the resin at 90°C, emergencies up to 130°C

4.2 Available Sizes

3M™ Scotchcast™ Easy Dispenser 250 cartridge: 250 ml

3M™ Scotchcast™ Resin 2123 will be supplied in two-chamber plastic cartridge with a static mixer to ensure a correct mixing ratio for applying the resin. Cartridge can be mounted into commercial available application guns. For humidity protection the cartridge is supplied in an aluminium guard bag which must stay closed until the first use.

4.3 Application Condition

Keep cartridges at 5°C or warmer before mixing. In cooler conditions keep cartridges in warmer area until ready to mix.

4.4 Storage Condition and Shelf Life

3M™ Scotchcast™ Resin 2123 has a shelf life of 24 months when stored between 10°C and 40°C with humidity level < 75% in the original sealed bag. The expiration date of each product appears on the product packaging.

4.5 Safety and Handling

3M provides its customers with a product specific Material Safety Data Sheet (MSDS) to cover potential health effects, safe handling, storage, use and disposal information. 3M strongly encourages its customers to review the MSDS on its products prior to their use.

5. Additional information

To request additional product information, see address below.

Important notice

All statements, technical information and recommendations contained in this document are based upon tests or experience that 3M believes are reliable. However, many factors beyond 3M's control can affect the use and performance of a 3M product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluates the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method or application.

Values presented have been determined by standard test methods and are average values not meant to be used for specification purposes.

All questions of warranty and liability relating to 3M products are governed by the terms of the respective sale subject, where applicable, to the prevailing law.

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